

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow. At the time of the outstanding Office Action, claims 1-24 were pending. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

Allowable Subject Matter:

Applicant thanks the Examiner for indicating that claims 6, 12, 18 and 24 contain allowable subject matter.

Prior Art Rejections:

Claims 1-5, 7-11, 13-17 and 19-23 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2005/0271122 to Jonsson (hereinafter “Jonsson”) in view of U.S. Patent 6,748,009 to Reznik et al. (hereinafter “Reznik”).

Independent claim 1 recites a weighing controlling section that has the ability to “monitor a change in a power level of a sample of each of two or more delay profiles to be used in same power adding processing in delay profile calculation for path search processes and to exercise a weighting control for assigning weight to a power level of a specified sample, according to a result from the monitoring; wherein a judgment as to whether said weighting control is exercised on a specified sample depends upon a number of samples of a candidate for said weighting control.” (Similar language exists in independent claims 7, 13, and 19.) As an example, if only one sample of a candidate for weighting control exists, negative weight is assigned to a power level of the sample. If more than one sample exists, negative weight is only assigned if the difference in power levels among the samples meets or exceeds a threshold value. (page 3, paragraph 4). Thus, a weighting control is exercised on a candidate depending upon the number of samples of a candidate for said weighting control.

The outstanding Office Action correctly asserts that Jonsson does not disclose that the invention is employed in a CDMA communication system or the exercising of a weighting control where a judgment as to whether said weighting control is exercised on a specified

sample depends upon a number of samples of a candidate for said weighting control. (page 3, paragraph 4 of the Office Action) Rather, each sample in Jonsson is weighted. (paragraph 0071, lines 12-14) The Examiner relies on Reznik to teach this feature of the invention as claimed.

Reznik is directed towards a RAKE receiver and time diverse integration system to calculate the relative power of received samples. (Abstract). The Examiner utilizes the following section of Reznik to teach a path searching circuit employed in a CDMA (Code Division Multiple Access) communication system, “wherein a judgment as to whether said weighting control is exercised on a specified sample depends upon a number of samples of a candidate for said weighting control”:

“A block diagram of the RAKE finger allocation processor is shown in FIG. 8. The RAKE finger processor comprises a first rank filter, a RAKE finger detector, a second rank filter and an assignor. The First Rank Filter ranks, the input $\tilde{\mathbf{P}}_i^{HGC}$ from the cell search HGC in descending order and selects the M largest samples. These samples must be at least 2 samples away from each other. If there is no FAT finger assigned, then the output of threshold comparison block $\tilde{\mathbf{P}}_i^{HGC}$ is fed directly into the First Rank Filter block. The input of this block is the HGC output power above the threshold η_1 , as in Equation (1), i.e.:

$$\tilde{\mathbf{P}}_i^{HGC}, -200 \leq i \leq 200 \quad (16)$$

This block ranks these powers in descending order such that:

$$P \frac{(1)}{FRF} \geq P \frac{(2)}{FRF} \geq \dots \geq P \frac{(M)}{FRF}, \quad (17)$$

where $P_{FRF}^{(1)} = \max(\tilde{\mathbf{P}}_i^{HGC})$ and the subscript FRF represents First Rank Filter and M is a design parameter. The output of this block is not the correlation powers but the time indices corresponding to their powers, i.e.:

$$[I_1, I_2, \dots, I_M] \quad (18)$$

These samples are preferably checked to make sure they are separated by 2 samples to get the preferred chip duration multi-path resolution and pruned if they are not sufficiently separated. In other words, the sample corresponding to I_{j+1} is pruned if the following relationship is not satisfied:

$$[I_j - I_{j+1}] \geq 2, j=1, 2, \dots, M-1 \quad (19)$$

Thus, the powers are ranked in descending order with regards to the first rank filter, which ranks the input threshold comparison block from the cell search and selects the M largest samples. The Examiner asserts that this is equivalent to the “judgment as to whether said weighting control is exercised on a specified sample,” which depends upon the number of samples of a candidate for said weighting control. Specifically, the Examiner asserts that this passage is read as “ranking the powers in descending in order with at least two samples, where the ranking is the weighting control.”

Applicants respectfully submit that this teaching of Reznik is in no way equivalent to the judgment of the invention as claimed. First, ranking samples in order is in no way equivalent to weighting samples. Second, even if ranking were incorrectly compared to weighting samples, there is no teaching or disclosure in Reznik of a judgment of whether or not to rank samples based upon the number of samples. Rather, Reznik discloses that the first rank filter takes the samples and selects samples that must be at least 2 samples away from each other. There is no determination in Reznik of how many samples are selected, and a corresponding action based upon the number of samples selected. Rather, all selected samples undergo the same processing. Thus, Reynolds also fails to teach the judgment of the invention as claimed. There is no teaching or disclosure in Reynolds of a path searching circuit employed in a CDMA (Code Division Multiple Access) communication system, “wherein a judgment as to whether said weighting control is exercised on a specified sample depends upon a number of samples of a candidate for said weighting control.”

If this rejection is maintained, the Examiner is respectfully requested to point out where this feature can be found in either Jonsson or Reznik.

The dependent claims are also patentable for at least the same reasons as the independent claims on which they ultimately depend. In addition, they recite additional patentable features when considered as a whole. As mentioned above, Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

Conclusion:

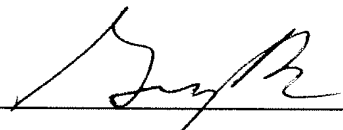
Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing or a credit card payment form being unsigned, providing incorrect information resulting in a rejected credit card transaction, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. § 1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date 8/8/2008

By 

FOLEY & LARDNER LLP
Customer Number: 22428
Telephone: (202) 945-6014
Facsimile: (202) 672-5399

George C. Beck
Attorney for Applicant
Registration No. 38,072